34. (New) An optoelectronic display device according to claim 33, wherein said photoluminescent layer has a dichroic ratio in its emission of more than about 5.

35. (New) A display device according to claim 33, wherein said display device additionally comprises at least one electrooptical light valve.

36. (New) A display device according to claim 35, wherein said electrooptical light valve includes a liquid crystal cell having a liquid crystal layer which is electrically switchable.

37. (New) A display device according to claim 33, wherein said device comprises at least one polarizer selected from the group consisting of absorbing polarizer, scattering polarizer and reflecting polarizer.

38. (New) A display device according to claim 35, wherein said photoluminescent layer is located between the viewer and said electrooptical light valve.

39. (New) A display device according to claim 35, wherein said electrooptical light valve is located between the viewer and said photoluminescent layer.

40. (New) A display device according to claim 33, wherein said device comprises at least two thin photoluminescent layers wherein said layers have unequal photoemission or absorption spectra or both.

41. (New) A display device according to claim 33, wherein said thin photoluminescent layer has a thickness of less than 300 μm.

42. (New) A display device according to claim 33, wherein said thin photoluminescent layer has a thickness of less than 50 μm.

43. (New) A display device according to claim 33, wherein said thin photoluminescent layer has a thickness of less than 10 μm.

44. (New) A display device according to claim 33, wherein said thin photoluminescent layer has a dichroic ratio in its absorption of more than 10.

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45. (New) A display device according to claim 33, wherein said thin photoluminescent layer has a dichroic ratio in its absorption of more than 20.

46. (New) A display device according to claim 33, wherein said thin photoluminescent layer has a dichroic ratio in its emission of more than 15.

47. (New) A display device according to claim 33, wherein said thin photoluminescent layer has a dichroic ratio in its emission of more than 35.

48. (New) A display device according to claim 35, wherein said thin photoluminescent layer is located inside said electrooptical light valve.

49. (New) A display device according to claim 35, wherein said thin photoluminescent layer is located inside said electrooptical light valve and acts as orientation layer.

50. (New) A display device according to claim 33, wherein said thin photoluminescent layers are patterned.

51. (New) A display device according to claim 33 that is characterized in that said device comprises multiple elements, pixels or arrays thereof of said photoluminescent layers.

52. (New) A display device according to claim 33 that is characterized in that said device additionally comprises multiple electrooptical light valves.

53. (New) A display device according to claim 33 that additionally comprises a light source wherein said light source is characterized in that its emission spectrum overlaps with the absorption spectrum of said photoluminescent layer.

54. (New) A display device according to claim 33 that additionally comprises at least one dichroic mirror.

55. (New) A display device according to claim 33, wherein said thin photoluminescent layer is obtainable by a technique selected from the group consisting of tensile orientation, oriented growth, friction, photo-induced alignment and alignment in electric, magnetic and flow fields or combinations thereof, of photoluminescent substances.

56. (New) A display device according to claim 33, wherein said thin photoluminescent layer comprises one or more at least partially conjugated oligomers or one or more at least partially conjugated polymers or both.

57. (New) A display device according to claim 33, wherein said oligomer or polymer comprises one or more unsubstituted or substituted phenyleneethynylene moieties wherein said moieties may be the same or different at each occurrence.

58. (New) A display device according to claim 33, wherein said device has a viewing angle of 160 degrees or more or a brightness of 50 cd/m^2 or more, or both.

59. (New) A method to improve the brightness or contrast or both an optoelectronic display by (i) incorporation of at least one thin, photoluminescent layer that is characterized in a high degree of polarization in its absorption and that is characterized by an emission which is either polarized or not polarized wherein said layer has a thickness of less than about 1 mm and a dichroic ratio in its absorption of more than 5; and (ii) causing said layer to emit light by photoexcitation.

60. (New) A method according to claim 59 wherein said photoluminescent layer has a dichroic ratio in its emission of more than about 5.

61. (New) A method to improve the viewing angle of an optoelectronic display by (i) incorporation of at least one thin, photoluminescent layer that is characterized in a high degree of polarization in its absorption and that is characterized by an emission which is either polarized or not polarized wherein said layer has a thickness of less than about 1mm

and a dichroic ratio in its absorption of more than about 5; and (ii) causing said layer to emit light by photoexcitation.

62. (New) A method according to claim 61, wherein said photoluminescent layer has a dichroic ratio in its emission of more than about 5.

63. (New) An optoelectronic display device of high brightness and high contrast or large viewing angle or both obtainable by incorporation of at least one thin photoluminescent layer that is characterized in a high degree of polarization in its absorption and that is characterized in an emission which is either polarized or not, wherein said layer has a thickness of less than about 1 mm and a dichroic ratio in its absorption of more than about 5.

64. (New) An optoelectronic display device according to claim 63, wherein said photoluminescent layer has a dichroic ratio in its emission of more than about 5.--

REMARKS

Upon entry of this amendment, claims 1-32 have been cancelled and new claims 33-64 have been added to the application for examination. No new matter has been used in formulating these new claims.